

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P1589758

Luminaire Tested: 24CZSP-SB-43HE-L845-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589758
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-8)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-SB-43HE-L845-S
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 4000 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

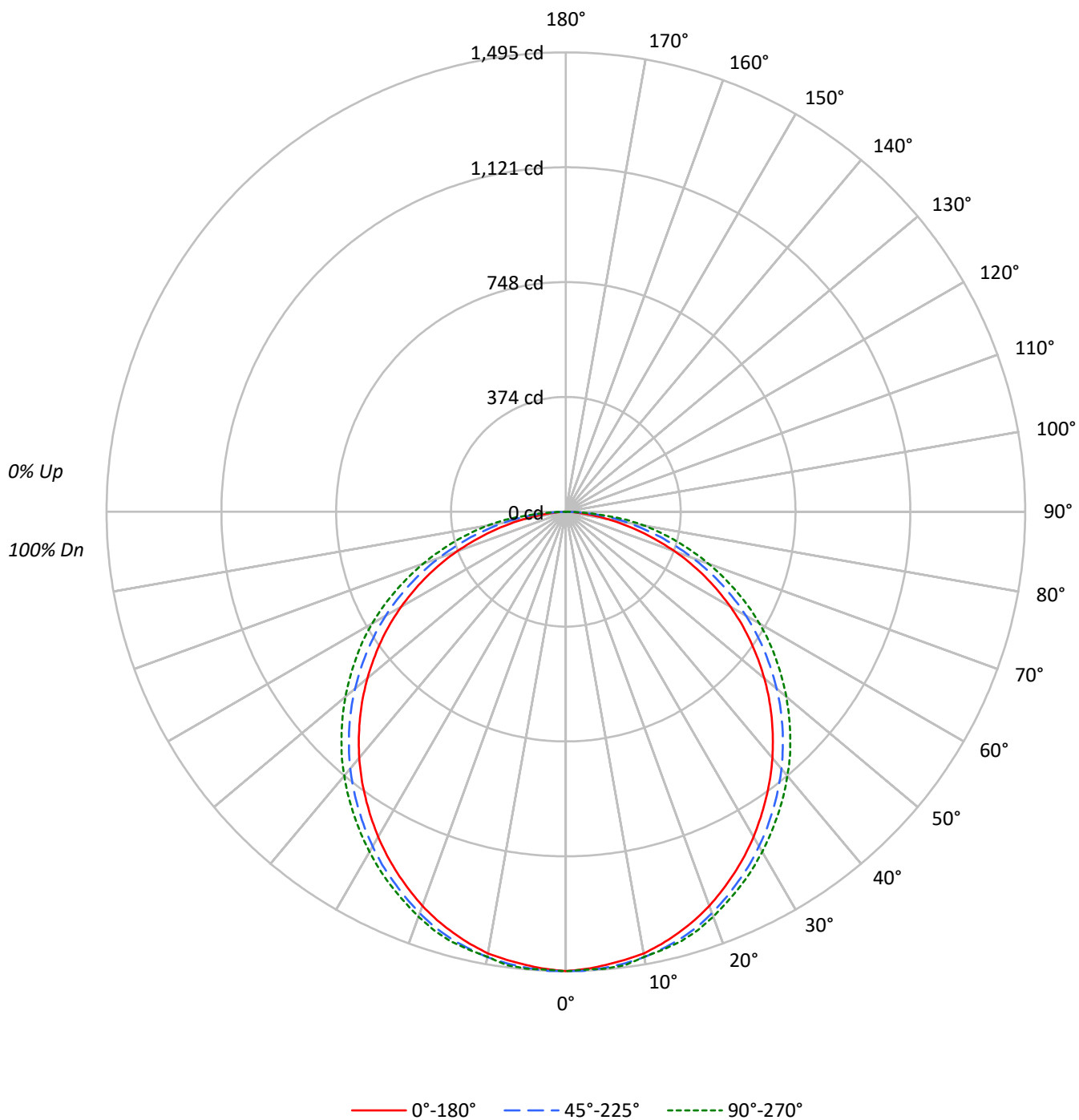
Lumens per Lamp: N/A
Luminaire Lumens: 4349.0 lumens
Efficiency: N/A
Efficacy: 147.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 29.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P1589758

CATALOG NUMBER: 24CZSP-SB-43HE-L845-S

Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10			0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	108	103	99	95	106	101	97	93	97	94	90		93	90	88		89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74		81	76	72		78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62		71	66	61		69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40		51	45	39		50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		45	39	35	33
8	60	46	38	32	58	45	37	31	44	37	31		43	36	31		42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26		37	30	25		36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2290	2290	2290
5°	2277	2290	2294
10°	2270	2289	2287
15°	2249	2282	2295
20°	2225	2266	2286
25°	2193	2244	2272
30°	2161	2224	2260
35°	2125	2202	2250
40°	2091	2183	2243
45°	2053	2160	2237
50°	2008	2133	2231
55°	1959	2106	2228
60°	1897	2075	2230
65°	1811	2031	2218
70°	1693	1969	2212
75°	1500	1894	2220
80°	1222	1799	2286
85°	789	1661	1973

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2316 cd/sqm

TEST NUMBER: P1589758

CATALOG NUMBER: 24CZSP-SB-43HE-L845-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.5	3.3
10°-20°	405.2	9.3
20°-30°	610.9	14.0
30°-40°	735.0	16.9
40°-50°	766.7	17.6
50°-60°	702.8	16.2
60°-70°	551.8	12.7
70°-80°	335.9	7.7
80°-90°	99.4	2.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1157.5	26.6
0°-40°	1892.5	43.5
0°-60°	3362.0	77.3
0°-90°	4349.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4349.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1495	1495	1495	1495	1495	
5°	1481	1490	1489	1488	1492	141
15°	1418	1432	1439	1441	1447	400
25°	1298	1315	1328	1336	1344	598
35°	1137	1154	1178	1195	1203	711
45°	948	967	997	1021	1033	731
55°	734	752	789	820	834	655
65°	500	518	560	598	612	494
75°	254	277	320	358	375	269
85°	45	64	94	106	112	58
90°	0	0	0	0	0	

TEST NUMBER: P1589758

CATALOG NUMBER: 24CZSP-SB-43HE-L845-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1495.0	1495.0	1495.0	1495.0	1495.0
2.5°	1489.4	1496.9	1495.0	1488.5	1491.3
5°	1481.0	1490.4	1489.4	1487.6	1492.2
7.5°	1470.7	1481.0	1481.9	1481.9	1487.6
10°	1459.5	1469.8	1471.6	1468.8	1470.7
12.5°	1440.8	1452.9	1456.7	1456.7	1459.5
15°	1418.3	1432.4	1438.9	1440.8	1447.3
17.5°	1394.0	1409.0	1417.4	1422.1	1427.7
20°	1365.0	1380.9	1390.3	1395.9	1402.4
22.5°	1332.2	1350.0	1360.3	1365.9	1373.4
25°	1297.6	1315.4	1327.6	1336.0	1344.4
27.5°	1261.1	1278.0	1294.8	1305.1	1312.6
30°	1221.9	1239.6	1257.4	1270.5	1278.0
32.5°	1179.7	1198.5	1219.0	1233.1	1241.5
35°	1136.7	1154.5	1177.9	1194.7	1203.1
37.5°	1092.7	1111.5	1135.8	1153.6	1163.8
40°	1046.0	1065.6	1091.8	1111.5	1121.7
42.5°	997.3	1016.0	1045.0	1067.5	1079.6
45°	947.7	967.4	997.3	1020.7	1032.9
47.5°	896.3	915.0	947.7	974.9	985.2
50°	842.9	860.7	895.3	924.3	936.5
52.5°	788.7	807.4	842.0	872.9	886.0
55°	733.5	752.2	788.7	820.5	834.5
57.5°	677.4	696.1	733.5	766.2	783.1
60°	619.3	638.1	677.4	711.0	727.9
62.5°	559.5	579.1	619.3	654.0	671.7
65°	499.6	518.3	560.4	597.8	611.9
67.5°	439.7	458.4	499.6	537.0	553.9
70°	378.0	399.5	439.7	479.0	494.0
72.5°	313.4	337.7	378.0	419.1	434.1
75°	253.5	276.9	320.0	358.3	375.2
77.5°	194.6	219.9	260.1	299.4	316.2
80°	138.5	162.8	204.0	241.4	259.2
82.5°	87.9	109.5	150.6	184.3	197.4
85°	44.9	63.6	94.5	105.7	112.3
87.5°	13.1	22.5	33.7	42.1	46.8
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1589758

CATALOG NUMBER: 24CZSP-SB-43HE-L845-S

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	14.38	16.04	14.74	16.35	16.67	15.11	16.77	15.48	17.09	17.40
	3H	16.15	17.65	16.52	17.98	18.34	17.19	18.70	17.57	19.02	19.38
	4H	16.77	18.19	17.16	18.53	18.91	18.06	19.48	18.46	19.82	20.20
	6H	17.17	18.49	17.58	18.86	19.25	18.80	20.12	19.21	20.48	20.87
	8H	17.28	18.54	17.70	18.93	19.32	19.10	20.36	19.52	20.75	21.14
	12H	17.33	18.53	17.76	18.92	19.34	19.29	20.50	19.72	20.88	21.31
4H	2H	15.15	16.57	15.54	16.91	17.29	15.72	17.14	16.12	17.48	17.86
	3H	17.14	18.33	17.55	18.73	19.13	18.03	19.23	18.44	19.62	20.02
	4H	17.88	18.96	18.31	19.38	19.81	19.05	20.13	19.48	20.55	20.98
	6H	18.41	19.36	18.86	19.80	20.25	19.95	20.90	20.41	21.34	21.80
	8H	18.55	19.44	19.01	19.88	20.35	20.32	21.21	20.78	21.65	22.12
	12H	18.63	19.43	19.11	19.91	20.37	20.58	21.38	21.05	21.85	22.32
8H	4H	18.33	19.22	18.78	19.66	20.12	19.35	20.24	19.81	20.68	21.14
	6H	18.99	19.73	19.48	20.22	20.69	20.40	21.15	20.90	21.63	22.11
	8H	19.20	19.86	19.71	20.37	20.85	20.88	21.54	21.38	22.05	22.53
	12H	19.33	19.92	19.84	20.41	20.97	21.23	21.82	21.73	22.31	22.87
12H	4H	18.41	19.21	18.89	19.68	20.15	19.37	20.17	19.85	20.65	21.12
	6H	19.11	19.78	19.62	20.28	20.77	20.46	21.12	20.96	21.63	22.11
	8H	19.39	19.98	19.90	20.47	21.03	20.99	21.58	21.50	22.07	22.63